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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/672,675

09/28/2000

R. Donald Thompson

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03/19/2004

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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT

PAPER NUMBER

2175

DATE MAILED: 03/19/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

12

Office Action Summary

Application No.

09/672,675

Applicant(s)

THOMPSON, R. DONALD

Examiner

Neveen Abel-Jalil

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 24-27 is/are allowed.
- 6) ☒ Claim(s) 15-23 is/are rejected.
- 7) ☒ Claim(s) 20, 21 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The Request for Reconsideration filed on February 9, 2004 has been received and entered. Claims 1-28 are pending.

Claim Objections

2. Claims 15-16, 22-23 and 28 are objected to under 37 CFR 1.75(c) as being improperly written multiple dependent claims, but are in fact multiple independent claims. Claims 15-16, 22-23 and 28 should be re-written either as separate independent claims or separate claims containing independent and corresponding dependent claims. See MPEP § 608.01(n). Accordingly, the claims 15-16, 22-23 and 28 not been further treated on the merits.

Dependent claims 15-16, 22-23 and 28 are objected to because of the following informalities:

Claims 15-16, 22-23 and 28 need to be rewritten to include the missing elements of the claims they incorporate. Claims 15 and 16 should be rewritten to include the elements of claim 1 as stated in the claim. Claims 22 and 23 should be rewritten to include the elements of claim 17. Claim 28 should be rewritten to include the elements of claim 24.... Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 17-18, and 22-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hertz (U.S. Pub. No. 2003/0037041 A1).

As to claim 17, Hertz discloses a method in a computer system for correlating a payload with a subset of attributes for selecting a payload set (See pages 13-14, paragraph 017, and pages 13-14, paragraph 0147), the method comprising:

generating an expression tree having multiple levels corresponding to the subset of attributes (See pages 31-32, paragraphs 0320-0323):

mapping the expression tree into an evaluation tree (See page 7, paragraph 0099; and correlating the expression tree into the catalog (See page 16, paragraph 0172).

As to claim 18, Hertz discloses optimizing the expression tree prior to mapping the expression tree into an evaluation tree (See page 27, paragraph 0286, also see page 29, paragraph 0301).

As to claim 22, Hertz discloses a computer-readable medium having computer-executable instructions for performing steps recited in any one of Claims 17-21 (See page 19, paragraph 0187).

As to claim 23, Hertz discloses a computer system having a processor and memory in an operating environment, the computer system for performing the steps recited in any one of Claims 17-21 (See page 19, paragraph 0187).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hertz (U.S. Pub. No. 2003/0037041 A1) in view of Chaudhuri et al. (U.S. Patent No. 5,806,061).

As to claim 19, Herz discloses organizing the expression tree such that an attribute evaluator value expression is a leaf node and a connector is a tree node (See pages 31-32, paragraphs 0320-0323);

scoring any tree nodes (See pages 13-14, paragraph 0147), and wherein each leaf node score equals one (See pages 9-10, paragraph 0114); and

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for each level of the expression tree, organizing the nodes such that a right-most node has the highest score (See pages 7-8, paragraphs 103-104, also see page 15, paragraph 0163, and page 38, paragraph 0384) .

Herz does not teach wherein a disjunctive tree node score equals the sum of its subtree, wherein a conjunctive tree node score equals the product of its subtree.

Chaudhuri et al. teaches wherein a disjunctive tree node score equals the sum of its subtree (See Chaudhuri et al. column 10, lines 2-20, wherein “score” reads on “grade”, also see Chaudhuri et al. column 9, lines 10-43), wherein a conjunctive tree node score equals the product of its subtree (See Chaudhuri et al. column 11, lines 2-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Herz to include wherein a disjunctive tree node score equals the sum of its subtree, wherein a conjunctive tree node score equals the product of its subtree.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Herz by the teaching of Chaudhuri et al. to include wherein a disjunctive tree node score equals the sum of its subtree, wherein a conjunctive tree node score equals the product of its subtree because computing and assigning scores to matching patterns allows for efficient data storage and retrieval and more accurate query matching.

Allowable Subject Matter

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7. Claims 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for allowable subject matter:

The prior art of record (Hertz -U.S. Pub. No. 2003/0037041 A1- and Chaudhuri et al. - U.S. Patent No. 5,806,061) does not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), placing a lowest scoring leaf node as the topmost node of the valuation tree; placing conjunctive operations as right tree nodes; placing disjunctive operations as left tree nodes; and traversing the expression tree mapped into the evaluation tree, as claimed in dependent claim 20.

The prior art of record (Hertz -U.S. Pub. No. 2003/0037041 A1- and Chaudhuri et al. - U.S. Patent No. 5,806,061) does not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), storing a first attribute in the attribute list; storing one or more evaluators corresponding to the first attribute in evaluator list; storing one or more values corresponding to each of the one or more first attribute evaluators in the value list; if any conjunctions exist, storing one or more identifications of attributes corresponding to the first attribute; and if any payloads exist, storing one or more payloads corresponding to the first attribute, as claimed in dependent claim 21.

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8. Claim 28 would be allowable if rewritten to overcome the claim object, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

9. Claims 1-14, and 24-27 are allowed over the prior art made of record.

The following is a statement of reasons for allowance:

The prior art of record (Hertz -U.S. Pub. No. 2003/0037041 A1- and Chaudhuri et al. - U.S. Patent No. 5,806,061) does not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), a method in the computer system for correlating a subset of attributes to one or more payloads, the method comprising: obtaining a request for payload corresponding to a subset of client attributes; obtaining one or more payloads, wherein each payload defines a condition statement for delivering the payload; correlating the condition statement into a catalog, wherein the catalog includes an attribute list, an evaluator list, a value list and a payload list; traversing the catalog to determine one or more payloads corresponding to the subset of client attributes; and returning the one or more payloads, as claimed in Independent claim 1.

Claims 2-14 are allowed over the prior art made of record, because it is dependent from the allowed independent claim 1.

The prior art of record (Hertz -U.S. Pub. No. 2003/0037041 A1- and Chaudhuri et al. - U.S. Patent No. 5,806,061) does not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), A computer-readable medium having computer-executable modules for correlating payloads with a condition statement for delivering the payload, the modules comprising: a master attribute module for storing a list of attributes; an evaluator module, dynamically linked to the attribute module, and containing evaluators corresponding to each attribute in the attribute list; a value module, dynamically linked to the evaluator module, and containing values corresponding to each evaluator in the evaluation module; a payload module, dynamically linked to the value module, and containing payload sets corresponding to each value in the value module, wherein the payload module may be empty; and a conjunction module dynamically linked to the value module and containing conjunction sets corresponding to each value in the value module, wherein the conjunction list may be empty, as claimed in independent claim 24.

Claims 25-27 are allowed over the prior art made of record, because it is dependent from the allowed independent claim 24.

Response to Arguments

10. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

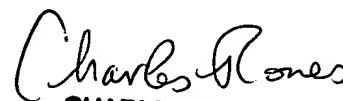
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil
March 16, 2004


CHARLES RONES
PRIMARY EXAMINER